



MICAD

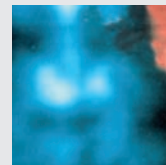
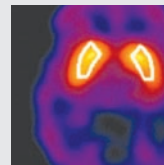
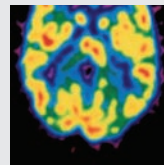
NIH
ROADMAP

Molecular Imaging & Contrast Agent Database

The Molecular Imaging and Contrast Agent Database (MICAD) is an online source of information on *in vivo* molecular imaging agents based on recommendations from the extramural community. MICAD was established as a key component of the "Molecular Libraries and Imaging" program of the NIH Roadmap, a set of major inter-agency initiatives accelerating medical research. By linking programs in molecular imaging, molecular probes, and molecular libraries, the NIH Roadmap provides much needed support for the development of new, more specific therapies for a wide range of diseases.

MICAD is edited by a team of scientific editors and curators at the National Library of Medicine, National Institutes of Health. This program is under the guidance of a trans-NIH panel of experts in the field.

The database includes agents developed for positron emission tomography (PET), single photon emission computed tomography (SPECT), magnetic resonance imaging (MRI), ultrasound (US), computed tomography (CT), and optical imaging. It contains textual information, references, numerous links to MEDLINE, and additional related resources at the National Center for Biotechnology Information (NCBI) and elsewhere.



<http://micad.nih.gov>

For more information, please contact:
micad@ncbi.nlm.gov

9-(4-[^{18}F]Fluoro-3-hydroxymethylbutyl)guanine ([^{18}F]FHBG)

Created: January 24, 2005
Updated: February 23, 2005

9-(4-[^{18}F]Fluoro-3-hydroxymethylbutyl)guanine ([^{18}F]FHBG)

Chemical name: 9-(4-[^{18}F]Fluoro-3-hydroxymethylbutyl)guanine
Abbreviated name(s): [^{18}F]FHBG
Synonyms: 2-Amino-9-[3-(4-[^{18}F]fluoromethyl)-4-hydroxybutyl]-1,9-dihydropurin-6-one
Backbone: Compound
Target: Herpes simplex virus thymidine kinase (HSV-tk)
Mechanism: Uptake and phosphorylation
Method of detection: PET
Source(s) of signals: [^{18}F]
Activation: No
In vitro studies: Yes
Rodent studies: Yes
Other non-primate: Yes
mammal studies: Yes
Non-human primate: Yes
studies: Yes
Human studies: Yes

Click on the above structure for additional information in [PubChem](#)

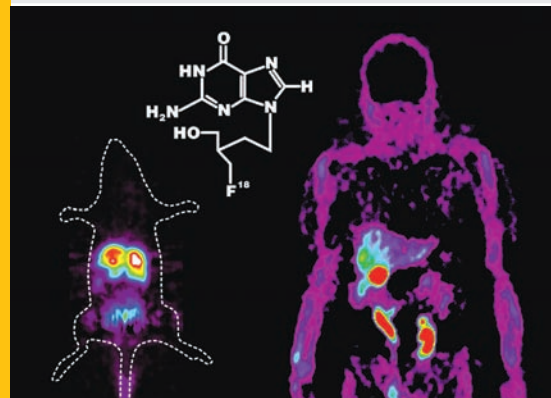
Above:

One of the imaging agents archived in the database. Each entry provides concise, up-to-date information on important topics such as synthesis of the agent, *in vitro*

studies (cells and tissues), and animal and human studies. It features a hyperlinked chemical structure that enables the reader to directly access additional important information through PubChem.

Some of the main features of MICAD:

- FREE access
- Fully indexed and searchable
- Concise, up-to-date information with the most relevant references
- Numerous links to PubMed and PubChem
- Printable PDFs



Images courtesy of Dr. Sam Gambhir, Stanford University.